

Abstract of the Invention

An insulating unit has a pair of glass sheets about an edge assembly to provide a compartment between the sheets. The edge assembly has a U-shaped spacer made of metal, metal coated plastic, gas and moisture impervious polymer, or gas and moisture impervious film coated polymer. The outer legs of the spacer and the glass provide a long diffusion path to limit the diffusion of argon gas out of the compartment. The edge assembly has materials selected and sized to provide edge assembly having an RES-value of at least 75.

A spacer for use in insulating units includes a plastic core having a gas impervious film e.g. a metal film or a halogenated polymer film.

Also taught herein are techniques for making the unit and spacer.